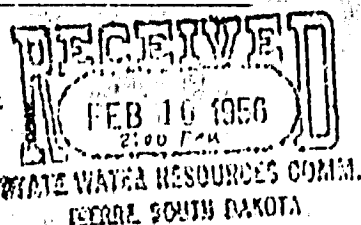


No. 145-3Water Division No. 3 Vermillion River District
(Blanks to be filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT To Appropriate Water within the State of South Dakota

(NOTE--Draw a line through items not applicable.)

1. Name of applicant South Dakota Department of Game, Fish and Parks
Postoffice address Pierre, County Hughes, State South Dakota

- I. If a corporation -----
(a) Name of same -----
(b) Date and place of incorporation -----
(c) Amount of capital stock -----
(d) Amount paid in -----
(e) Names and addresses of directors -----

(NOTE--A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant:

- (a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)

By Contract

- (b) Cash on hand, \$ Sufficient (c) Treasury stock, \$ -----
(d) Bonds to be issued, \$ ----- (e) Other resources, \$ -----

2. Name of diversion work East Vermillion Lake
3. Amount of water claimed 7040 acre feet plus 1650 acre feet annually after the lake is filled
4. Source of water supply East Vermillion River
5. Location of point of diversion Dam located in S of SE 1/4, Section 3, T 102 N, R 53 W
on McCook County.
6. Annual period or periods during which water is to be used As available
7. To be used for:

I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system?

- (a) Number of acres to be
- flooded
- 550
- acres.

- (b) Legal subdivisions to be irrigated -----

(NOTE--A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.)

- (c) Statement as to domestic use (giving location, etc.) -----

II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:

- (a) Nature of use
- Fish & Wildlife propagation, conservation and recreation
-
- Name any of the above uses claimed

- (b) Amount of power to be generated ----- horse power.

Amount claimed for engine cooling -----

- (c) Location of plant -----

- (d) Method of developing power -----

- (e) Point where water will be returned to stream
- Immediately below dam

Map. No. 118-3

8. Estimated cost of work:

(a) Head Gates, \$.....

(b) Pumping plant, \$.....

(c) Fluming, \$.....

(d) Canal-earth, \$.....

Rock, \$.....

(e) Other structures Dam, Spillway & riprap.....\$300,000.00

Total, \$.....

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

II. Dimensions of works:

(a) Dam: Height 44 feet; length at bottom 800 feet; length at top 1800 feet; thickness at bottom 240 feet; thickness at top 20 feet; slope at front water face 3 to 1; slope at back face 2 to 1; material used in construction compacted earth

(b) Reservoir: Capacity when filled 7050 acre feet. Surface area at highwater mark 900 acres.

DEPTH AT OUTLET-Feet	SURFACE AREA AT EACH DEPTH AT OUTLET-ACRES	ACRE-Feet CAPACITY
32	550 acres - Normal lake level	7050

(c)* Head gate: Width.....feet; height.....feet;
Material.....

(d) Canal: Total length.....miles.

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER-LINE	GRADE PER MILE
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet
At.....Mile	feet	feet	feet	feet

(Give dimensions where reductions in size are made.)

10. Time required for completion of work 3 years.11. Time required for complete application of water to the proposed beneficial use 5 years.12. Choice of newspaper for publication of notice of intention to appropriate Cent. Sta. Clipper

STATE OF SOUTH DAKOTA

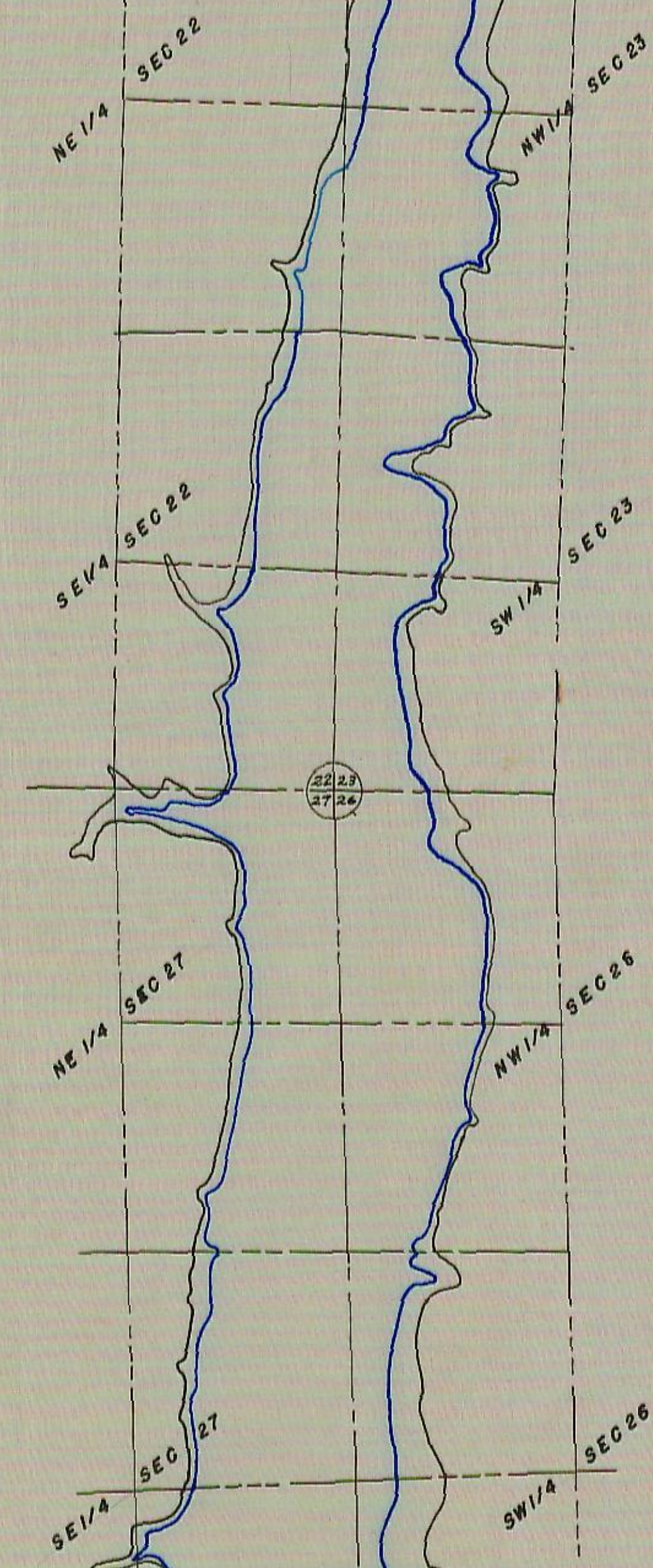
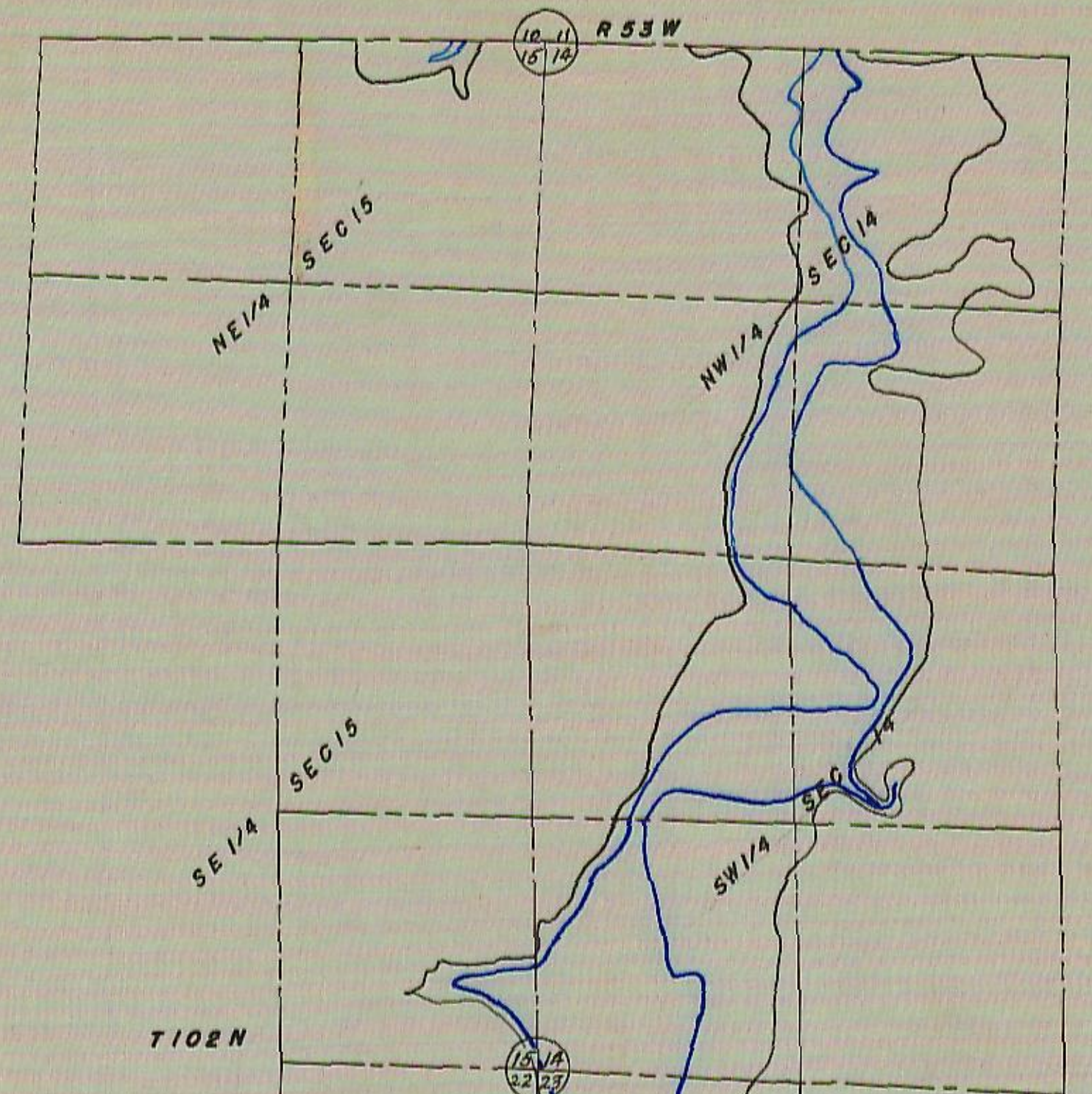
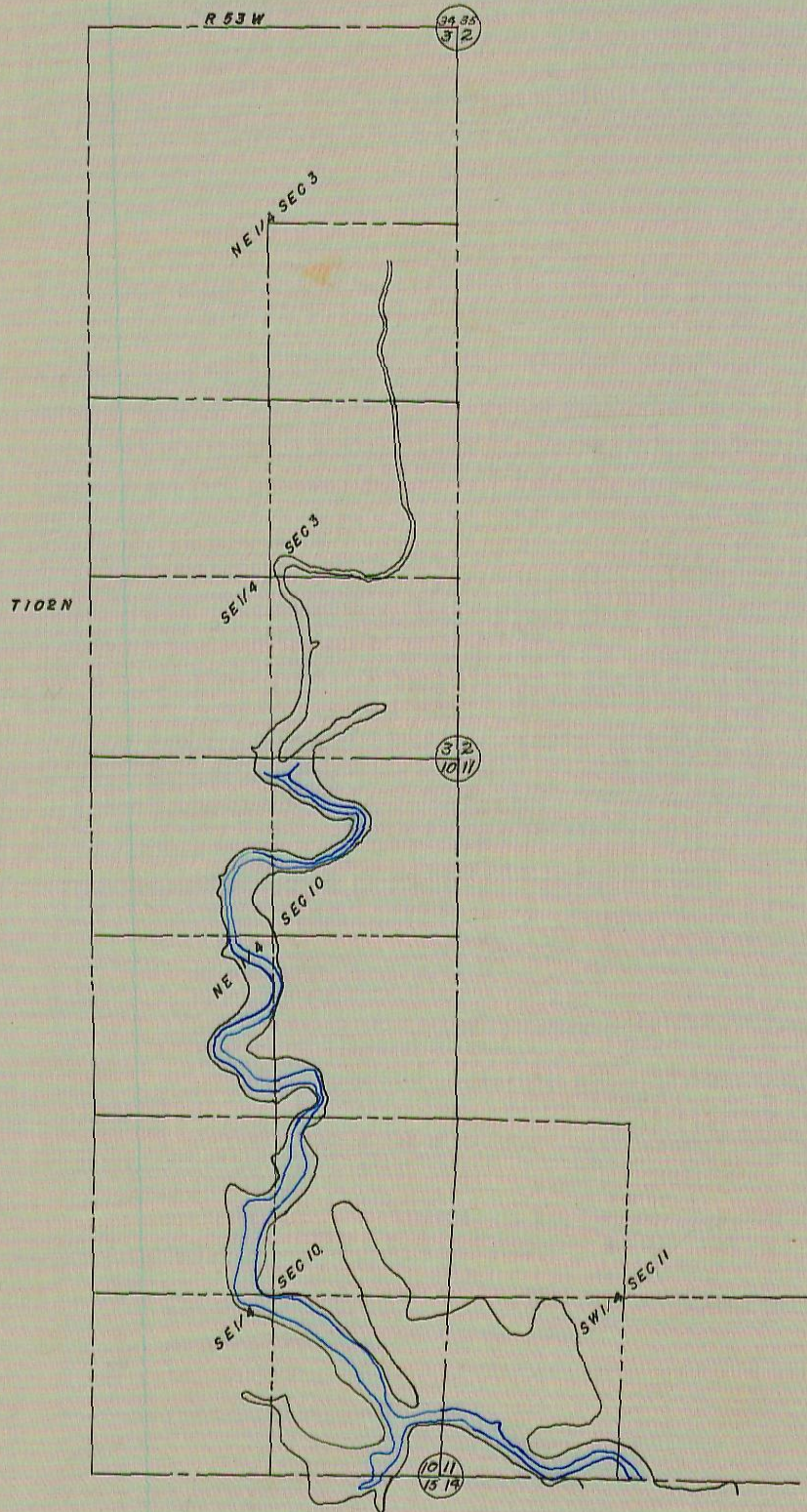
County of Hughes ss.

I, Elmer Peterson, Director, South Dakota Dept. of Game, Fish, and Parks duly sworn on my oath depose and say: That my relation to the above described undertaking is that of owner, that I have read the above foregoing statement, examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed Elmer PetersonSubscribed and sworn to before me this 10th day of February 1936Edward Wilson
Notary Public (or other qualified officer.)

PROPOSED LAKE IN-T102N-R53W McCOOK COUNTY SOUTH DAKOTA

SCALE 1"=700'

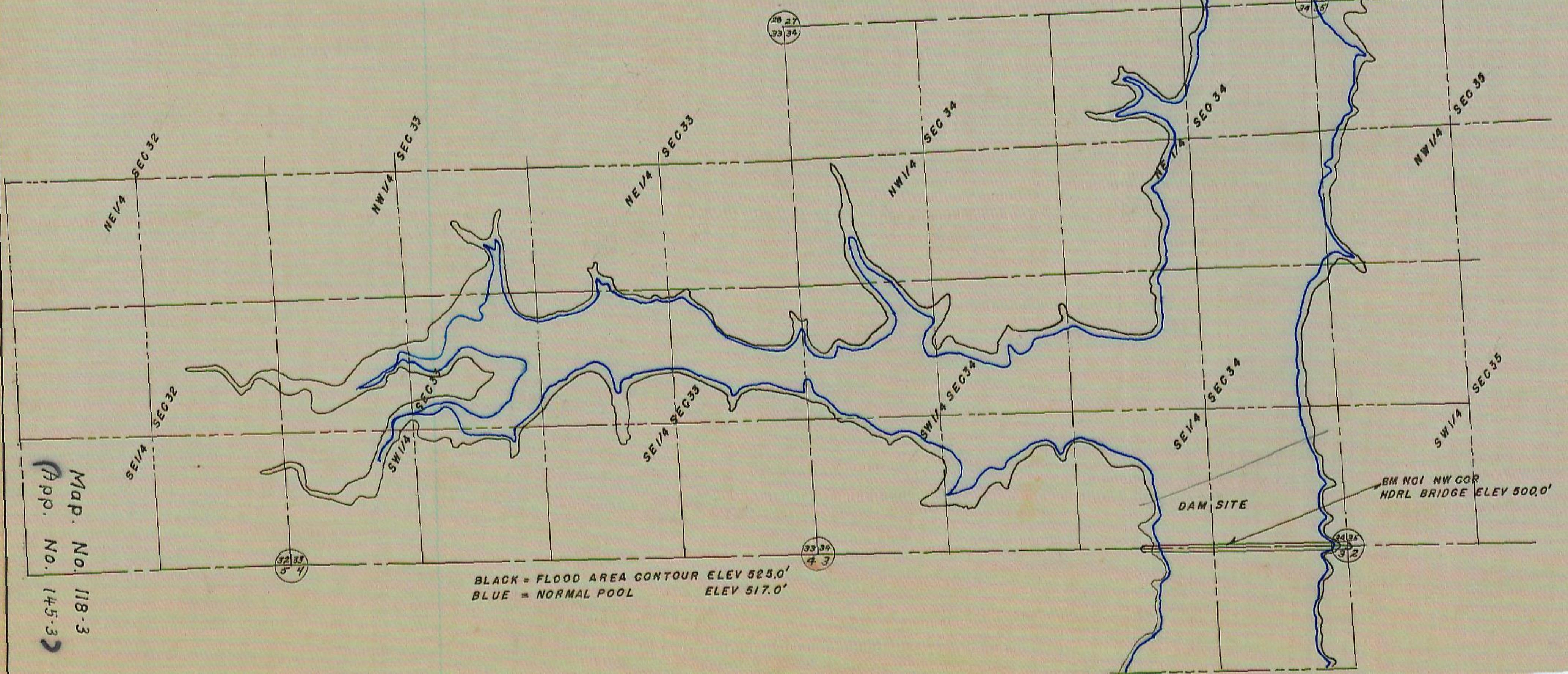


CERTIFICATE OF SURVEYOR

I, _____, REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR, DO HEREBY CERTIFY THAT AT THE DIRECTION OF THE SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS I HAVE SURVEYED THE SITE OF THE PROPOSED DAM AND RESERVOIR LOCATED IN T102N - R 53 W McCOOK COUNTY SOUTH DAKOTA. THE LOCATION IS AS SHOWN ON THE PLAT.

IN WITNESS WHEREOF I HAVE SET MY HAND AND SEAL THIS _____ DAY OF _____ 1956 A.D.

SURVEYOR



BLACK = FLOOD AREA CONTOUR ELEV 525.0'
BLUE = NORMAL POOL ELEV 517.0'

Map No. 118-3
App. No. 145-3

Remarks by State Water Resources Commission:

7 pipe, 6 inches in diameter, shall be installed through the dam, the centerline of the pipe being 5 1/2 feet below the crest of the spillway.

STATE OF SOUTH DAKOTA
County of Hughes } ss.

Pierre, South Dakota, March 2, 1956

This is to certify that the foregoing application was received by the Commission at 2:00 o'clock P.m. upon the 10 day of February, 1956

State Water Resources Commission

By: Joel Himes
Chief Engineer, Executive Officer

Number of permit 1455

Date of first receipt of application February 10, 1956

Date of return to applicant for correction, amendments or changes required as follows: _____, 19____

Date of receipt of corrected application _____, 19____

Date from which applicant may claim right February 10, 1956

Approved July 9, 1956, Recorded in Book 3 Page 167

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before _____

February 14, 1958

2nd. The whole of said work is to be completed on or before August 14, 1959

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is

August 14, 1963

4th. The water appropriated shall be used for the purpose of Recreation, Conservation,

and fish and wild life propagation

5th. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of the appropriation herein granted shall not exceed 7440 acre feet the first year and 1650 acre feet annually thereafter cubic feet per second; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for recreation, conservation, and fish and wild life propagation in or before August 14, 1963; said water to be used during the following described annual period:

Perpetual

Witness my hand this 14 day of August, 1956

State Water Resources Commission

By: Joel Himes
Chief Engineer, Executive Officer

Certificate of Construction Issued _____, 19____

Water License Issued _____, 19____

RECEIVED
MAY 4 1956

STATE WATER RESOURCES COM.
PIERRE, SOUTH DAKOTA

STATE OF SOUTH DAKOTA
COUNTY OF McCook

The undersigned, being first duly sworn, on his oath says The Canistota Clipper is a weekly newspaper of general circulation, printed and published in the City of Canistota, McCook County, South Dakota, by Wendell Anderson, and has been such newspaper during the time hereinbefore mentioned; that it has bona fide circulation of more than 500 copies weekly; that it has been published within said County of McCook in the English language and admitted to the United States mail under the second class mailing privilege for more than one year next prior to the publication of the notice hereinbefore mentioned, and has been printed during such period and at the present time in part in or office maintained at the said place of publication; that I, the undersigned, as publisher of said newspaper, and have personal knowledge of all the facts stated in this affidavit; that the advertisement

headed notice of intention to appropriate water

a printed copy of which is hereto attached, was printed and published in said newspaper for four successive weeks; that said notice was published in the issues of said paper on the dates as follows, to-wit:

The first publication being made on April 12, 1956 ;
the second publication on April 19, 1956 ;
the third publication on April 26, 1956 ;
the fourth publication on May 3, 1956 ;
the fifth publication on _____ ;
the sixth publication on _____ ;
the seventh publication on _____ ;
the eighth publication on _____ ;
the ninth publication on _____ ;

for the sum of \$10.75

being the full amount of the fee for publication of the notice, insured and published by the publisher of the said newspaper; that the undersigned is not a resident of the State of South Dakota and that the undersigned is a resident of the State of _____ ;

Wendell Anderson

(SEAL)

May 3, 1956
Wendell Anderson
Publisher, Canistota, S. Dak.

NOTICE OF INTENTION TO
APPROPRIATE WATER

Office of State Water Resources
Commission, Pierre, S. Dak.,
April 9, 1956.

Notice is hereby given that the Department of Game, Fish and Parks whose postoffice address is Pierre, S. Dak., has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 1650 acre feet of water annually from the East Vermillion River for storage in proposed East Vermillion Lake, the point of diversion of which is to be located across said stream in the S $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 34, Twp. 102 N., Range 53 W. Said water to be used for the purpose of providing Fish and Wildlife propagation, conservation and recreation.

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 7th day of May, 1956, at 2:00 P. M. All interested persons may appear and be heard. Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources Commission
By: J. W. Grimes, Chief
Engineer, Executive Officer.
(4-12-19-26 5-3)

(First Publication Before April 13, 1956.)

APPROPRIATION OF WATER

Office of State Water Resources Commission,

Pierre, S. Dak., April 9, 1956

Notice is hereby given that ~~the Department of Game, Fish & Parks~~ whose postoffice address is Pierre S. Dak., has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 1650 ~~acres~~ ^{annually} feet of water, ~~per second~~ ^{per second} from the ~~East Vermillion River~~ ^{East Vermillion River} for storage in proposed ~~XXXXXX~~ ^{XXXXXX} East Vermillion Lake, the point of diversion of which is to be located ~~on the across said~~ ^{on the} ~~bank of said stream in the~~ ³⁴ ~~34~~ ³⁴ of the ~~34~~ ³⁴ of Section 34 Twp. 102N Range 53W. Said water to be used for the purpose of providing irrigation on the following ~~XXXXXX~~ ^{XXXXXX} Fish and Wildlife propagation, conservation and recreation

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 24th day of May, 1956, at 2:00 P.M. All interested persons may appear and be heard.

Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources Commission

By:

J. W. Grimes, Chief Engineer, Executive Officer

cc: Wendell Anderson, Publisher
 Clipper
 Canistota, S. Dak.

May 1, 1956

Mr. Wendell Anderson, Publisher
The Canistota Clipper
Canistota, South Dakota

Dear Mr. Anderson:

In compliance with the request in your letter of April 25, 1956, we are returning herewith the Proof of Publication of the Notice of Intent to Appropriate Water for the Department of Game, Fish, and Parks, Pierre, South Dakota, dated May 3, 1956, and your Affidavit of Publication, dated May 3, 1956.

We note that you billed the Water Resources Commission for the publication expense. Paragraph 2 of the Letter to the Publisher, our Form No. 9, states in part, "The expense of publication will be paid by the applicant . . ." For your information we have delivered the bill for publication expense to the Office of the Department of Game, Fish, and Parks here in the State Office Building.

Also enclosed is another copy of Form No. 11, Proof of Publication, in case you should wish to make some changes before resubmitting it.

Sincerely,

J. W. GRIMES
Chief Engineer

LW:rs

Enc: 3

July 11, 1956

Mr. James B. Biggar
811-9th Avenue
Brookings, South Dakota

Dear *Jim* ~~Mr. Biggar~~:

We noted that although the matter of the Department of Game, Fish and Parks application, No. 145-3, on the East Vermillion River was discussed at the July 9 meeting, no official action was taken.

Mr. Munck and Mr. Ferris have been contacted and have given their approval to the application.

If you will recall, this application was held up during the May 7 meeting pending a satisfactory solution of the problem of satisfying domestic needs downstream. The solution, as discussed at the meeting, was the installation of a 6-inch pipe 5½ feet below spillway level. This would provide a flow of one cubic foot per second. I believe that this will keep the stream alive and provide sufficient water to satisfy domestic needs downstream.

Please advise if, in your opinion, this is a satisfactory solution to the problem so that we may continue the regular processing of this application.

Sincerely,

J. W. CRINES
Chief Engineer

LW:rs

Same letter to Jim Carl Cronin and Walt Taylor

Permit No. 145-3

145-3

Vermilion River Water District**Report Of Examination Of Works And/Or Application Of Water To Beneficial Use**

TO: Chief Engineer, Division of Water Rights, DWRN, Foss Bldg., Pierre, SD 57501

I have this day made a thorough examination of the water use system constructed by Department of
Game, Fish & Parks of Pierre, SD holder of
 Permit No. 145-3, bearing the priority of February 10 1956 authorizing
 the diversion of 7040 ^{Ac-Ft.} cu. ft. per second of the waters of East Vermilion River
 for Recreation purposes, in McCook County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

East Vermilion Dam
Spillway Elevation 1435.0 msl

B. Work used to transport water to place of use:

C. Works used to apply water to beneficial use:

The system is in the following condition Good

The point of diversion is located 1060 ft. West & 860 ft. North of the SE
corner of Section 34 T102N-R53W (1/2 SE 1/4)

The works are capable of diverting and conveying to the place of use 7040 Ac-Ft.cu. ft. per second of water which is to be used for Recreation, Fish & Wildlife

Water has been put to beneficial use to the maximum extent as follows:

comprising a total of _____ acres of land and the license should be issued for _____ cfs

Applicable permit qualifications have been complied with _____ Yes _____ No

Exceptions to compliance are: _____ Date June 2, 1992

(signature)

Timothy G. Schaal

145-3

CHECK LIST FOR FIELD INSPECTION

Permit Number 145-3 Date June 2, 1992
 Other permit(s) associated with the project _____

NOTE. For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

1. Diversion point legal location: 1060 ft. West of 860 ft. North of the
SE corner of Section 34 - T102N-R53W (3rd SE1/4)

2. Well Information: Well Drilling Firm _____

No. of Wells _____ Depth(s) _____

- | | |
|------------------------------------|---------------------------------------|
| a) Casing 1) diameter _____ inches | b) Screen 1) type _____ |
| 2) length _____ feet | 2) length _____ feet |
| 3) type _____ | c) Pump 1) make _____ |
| d) Static Water Level _____ feet | 2) model _____ |
| e) Motor: | 3) size _____ inches |
| 1) make _____ | 4) capacity _____ GPM |
| 2) model No. _____ | 5) turbine pump - No. of stages _____ |
| 3) horsepower rating _____ | 6) operating pressure _____ PSI |

3. Distribution lines or canals:

a) type _____ b) size _____ c) length _____

4. System Type:

a) Sideroll:

- 1) length _____ feet
- 2) diameter of pipe _____ inches
- 3) sprinkler spacing _____ feet

b) Towline:

- 1) length _____ feet
- 2) sprinkler spacing _____ feet

4. System Type (continued):

c) Siphons:

1) size _____ inches

2) number _____

e) Center pivot:

1) make _____

2) overall length _____ feet

3) number of towers _____

4) distance between towers _____ feet

5) end gun _____ (Y/N)

6) high or low pressure _____

7) capacity _____ GPM

d) Gated pipe:

1) length _____ feet

2) diameter _____ inches

3) spacing of gates _____ inches

f) Gun:

1) make _____

2) nozzle size _____ inches

3) capacity _____ GPM

4) hose size _____ inches

5) hose length _____ feet

5. Dam Information:

a) height to crest 21 feet

b) height to primary spillway 31 feet

c) height to secondary spillway 35.5 feet

d) crest width 20 feet

e) crest length 1489 feet

f) spillway length: _____ feet

g) spillway width 150 feet

h) approx. storage 7040 ac-ft

i) approx. storage to crest 17,400 ac-ft

j) date constructed 1958

k) outlet tubes:

1) diameter 4' x 4' inches

2) type Concrete

3) valved Yes (Y/N)

4) valve type Sluice Gate

5) location on structure

Near Center

l) category of dam III (I,II,III)

m) inspection sheet completed: _____ (Y/N)

n) name of contractor _____

6. Chemigation Equipment:

b) main line check valve _____ (Y/N)

d) low pressure drain _____ (Y/N)

f) interlock type _____

g) injection pump type _____

i) injection line check valve or positive displacement pump _____ (Y/N)

j) all chemigation equipment appears to be installed in proper position and comply with chemigation laws and rules _____ (Y/N)

k) comments :

a) does chemigate _____ (Y/N)

c) inspection port/air relief _____ (Y/N)

e) discharge is 20' from source _____ (Y/N)

h) injection check valve _____ (Y/N)



145-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3191

June 22, 1992

Tina Olson
Dept. of Game, Fish & Parks
Foss Building
523 East Capitol
Pierre, SD 57501

Dear Mr. Olson:

When we inspected East Vermillion Dam a few weeks ago, we also conducted a final inspection on Water Permit No. 145-3. Water Permit No. 145-3 was issued in 1956 for storage of 7040 Ac-Ft of water in East Vermillion Dam in DeWitt County. Since East Vermillion Dam stores 3170 Ac-Ft of water, another permit will be necessary for the additional Ac-Ft.

Enclosed is an Application for the 1130 additional Ac-Ft of storage in East Vermillion Dam. Please review the application and return it to us signed and notarized.

If you have any question, please feel free to contact me.

Sincerely,

Timothy G. Schaal, P.E.
Natural Resources Engineer III
Water Rights Division
(605) 773-1352

enclosure



DEPARTMENT OF GAME, FISH AND PARKS

Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182



February 8, 1993

Mr. John Hatch, Chief Engineer
Division of Water Rights
S.D. Department of Environment & Natural Resources
Foss Building, 523 E. Capitol
Pierre, SD 57501

Dear Mr. Hatch:

Attached is a signed and notarized application to appropriate water for storage of an additional 1,130 acre-feet of water in East Vermillion Lake, McCook County. We are filing this application upon the advice of your staff.

Upon inspection of the dam last summer, Mr. Schaal of your staff noted that actual storage of dam is 8,170 acre-feet as reported in the 1979 Corps of Engineers Phase I Inspection Report. Our existing water right for the dam is for storage of 7,040 acre-feet plus 1,650 acre-feet annually after the lake is filled. The 1,130 acre-feet of additional storage will update our water right and reflect actual storage.

We will check our files for information regarding original design plans or as-built drawings that may document original storage projections. Something that we would like to discuss further with you and your staff is the issue of the priority date that will be assigned to the new water right if issued.

Thank you for your assistance on this matter and if you have any questions please call me at 773-6208.

Sincerely,


Timothy J. Olson
Water Permits Coordinator

cc: Doug Hofer
Rick Collignon

Mail to: Water Rights Div.
523 E. Capitol
Pierre, SD 57501
(605) 773-3352

145-3

No. _____	Hydrologic Unit _____
Map No. _____	Basin _____
Newspaper _____	

Application For Permit To Appropriate Water Within The State Of South Dakota

- Check one or more of the following:
- Industrial ☐ Commercial ☐ Municipal ☐ Other Common Distribution System ☐
 Rural Water System ☐ Suburban Housing ☐ Geothermal Heat ☐ Institutional ☐ Recreational ☒
 Domestic ☐ (above 18gpm) Other ☒ Conservation, Fish & Wildlife Propagation

Type of Application: Check one or more of the following

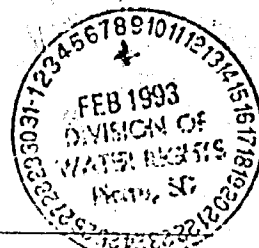
New ☒ Vested Right ☐ Future Use ☐ Change Use ☐

☐ Amend Permit No. _____ with old priority date retained

Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐

☐ Application to Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____

☐ Construction to use water reserved by Future Use Permit No. _____



1. Name of Applicant: South Dakota Dept. of Game, Fish & Parks Phone No. 773-6082

2. Office Address: Poss. Building, 523 E. Capitol, Pierre State SD 57501

Amount of water claimed: 1130 Ac-Ft.

3. Source of water supply: East Vermillion River

4. Location of point of diversion: 1060 ft. West & 860 ft. North of the SE corner of
Section 34-T102N-R53W (S1/2 SE1/4)

County: McCook

5. County where water will be used: McCook

6. Annual period during which water is to be used: January 1 thru December 31

7. Give a brief description of proposed project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

This application is for an additional 1130 Ac-Ft. of storage in East Vermillion Dam.

Rate Permit No. 145-3 allowed for 7040 Ac-Ft. of storage; however, the total storage capacity of East Vermillion Dam is 8170 Ac-Ft.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map (see instructions)

STATE OF SOUTH DAKOTA,
County of Bughes

I, Richard Beringson

the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction

Signed Richard Beringson

Subscribed and sworn to before me this 5th day of February 19 93

Carol J. Rich
Notary Public

Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction

- Drill Hole Diameter _____ Depth _____
- Casing Type _____ Diameter _____ Thickness _____
- Screen Type _____ Diameter _____ Thickness _____
- Gravel Pack Thickness _____ Length of Gravel Pack _____
- Depth to Top of Water Bearing Material _____
- Depth to Water (ground surface to water level) _____
- Distance to nearest existing domestic well:
 - On applicants property _____
 - On property owned by others _____

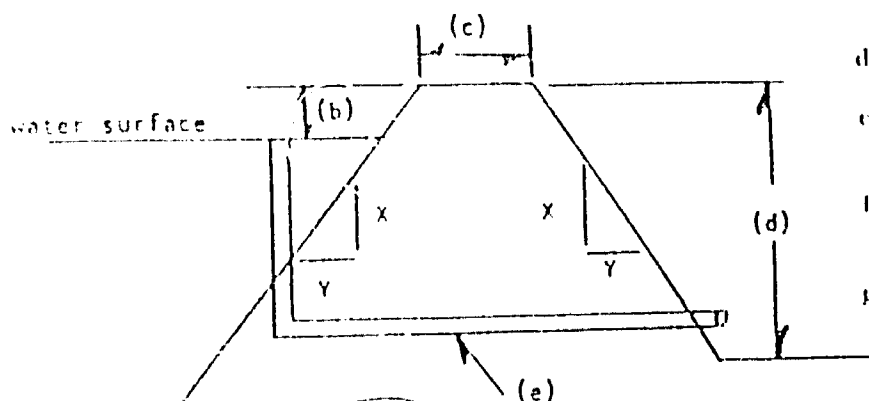
2. Dugout Information Estimates

- Surface Dimensions _____ Depth _____
- Depth to water (ground surface to water level) _____

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

- If a private engineering firm or government agency was involved in the design of this dam please give their name and address:
 - _____
 - _____



- Freeboard _____ 10 Ft.
- Crest Width _____ 20 Ft.
- Crest Length _____ 1489 Ft.
- Height _____ 41 Ft.
- Primary Outlet Capacity _____ 13760 cfs
If Pipe, diameter _____
- Secondary Spillway Capacity _____ 3500 cfs
Spillway width _____
- X & Y Slope
Upstream _____ 1 : 3
Downstream _____ 1 : 3

Surface Area of Impoundment _____ 29 1/2 acres

Storage _____ 8170 _____ acre feet

Drainage area above dam _____ 402 sq. mi.

Richard DeLong

State of California

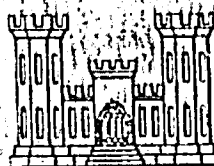
145-3

PHASE I INSPECTION REPORT
NATIONAL DAM SAFETY PROGRAM
EAST VERMILLION LAKE DAM
McCOOK COUNTY, SOUTH DAKOTA

OWNER:

STATE OF SOUTH DAKOTA
IDENTIFICATION NUMBER SD 00031

INSPECTED: 26 JULY 1979



U. S. ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS
OMAHA, NEBRASKA

PERTINENT DATA

A. GENERAL.

Name of Dam East Vermillion Lake
State South Dakota
Inventory of Dams I.D. Number . . SD 00031
Hazard Potential Classification . Low
Owner State of South Dakota

B. EMBARKMENT

Type	Earthen
Crest Length	1,489 Feet
Crest Width	20 Feet
Crest Elevation	1,445 m.s.l.
Height Above Stream Bed	41 Feet
Volume of Fill	522,000 C.Y. Earthfill

C. SPILLWAY

Type	Uncontrolled Concrete Chute
Location	Right Abutment
Side Slopes	Vertical Walls
Crest Elevation	1,435 m.s.l.
Crest Length	150 Feet
Discharge Capacity	9,840 c.f.s. at 1,443 m.s.l.

D. LOW LEVEL OUTLET

Inlet Type Drop Inlet Reinforced
Concrete Box

Inlet Elevation 1,414.3 m.s.l.

Conduit Type 4' x 4' Reinforced
Concrete Box

Conduit Length 226 Feet

E. RESERVOIR

<u>Type of Storage</u>	<u>Storage Volume</u> (acre-feet)	<u>Elevation</u> (feet m.s.l.)	<u>Surface</u> (acres)
Normal Pool	8,170	1,435	294
Spillway Crest	8,170	1,435	294
Maximum Pool	17,400	1,445	1,550

550 Ac.

F. DRAINAGE AREA

Total Drainage Area 640 Square Miles

Contributing Drainage Area 402 Square Miles

145-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

February 17, 1993

Tim Olson
Department of Game, Fish & Parks
Joe Foss Building
523 East Capitol
Pierre, SD 57501

Dear Mr. Olson:

I am writing in reference to your February 8, 1993, letter and application for additional storage in East Vermillion Dam.

Originally we had indicated that the Department of Game, Fish & Parks needed to file an application for an additional 1,130 acre-feet of storage in East Vermillion Dam. We arrived at this figure by taking the difference between the 7,040 acre-feet mentioned on the Water Permit No. 145-3 and the 8,170 acre-feet taken from the 1979 Corps of Engineers Phase I Inspection Report.

After additional investigation of these figures, it appears there is an error in the figure used in the Corps of Engineers Report. Taking a depth of 32 feet multiplied by the surface area of 550 acres multiplied by a coefficient of 0.4 ($32 \times 550 \times 0.4 = 7,040$), the 7,040 acre-feet figure used on Water Permit No. 145-3 appears to be a reasonable number to use as the normal storage capacity of East Vermillion Dam.

Therefore, an application for additional storage will not be required at this time. We will continue the process of issuing a Water License on Water Permit No. 145-3 for the 7,040 acre-feet of normal storage at East Vermillion Dam.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script, which appears to read 'Timothy G. Schaal', is written over the printed name.

Timothy G. Schaal, P.E.
Natural Resources Engineer III
Water Rights Divisions
(605) 773-3352

145-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 145-3

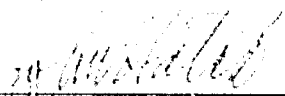
(1) The South Dakota Department of Game, Fish & Parks, of 523 E Capitol, Pierre, SD 57501 made Application No. 145-3, February 10, 1956 for a water permit to store 7,040 acre feet of water with an annual fill of 1,650 acre feet from the East Vermillion River, to be stored in East Vermillion Dam, McCook County, South Dakota for recreation and fish & wildlife propagation purposes. Permit No. 145-3, with a priority date of February 10, 1956 was approved July 9, 1956 and issued to the applicant(s) for diversion of water with construction of the described water supply system to be completed on or before August 14, 1959 and for the application to beneficial use of said water on or before August 14, 1963.

(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to store 7,040 acre feet of water with an annual fill of 1,650 acre feet of water for beneficial use. The location of the spillway is 1,060 feet west and 860 feet north of the SE corner of Section 34, T102N, R53W (S 1/2 SE 1/4).

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 the South Dakota Department of Game, Fish & Parks of 523 E Capitol, Pierre, SD 57501 the holder(s) and/or owner(s) of Water Permit No. 145-3 is issued a license to appropriate water, the right to store 7,040 acre feet of water with an annual fill of 1,650 acre feet of water from the East Vermillion River to be stored in the East Vermillion Dam with a priority date of February 10, 1956 from the location specified in (2) of this license. The water is to be used for recreation and fish & wildlife propagation purposes. This license is subject to any limitations or qualifications listed in Water Permit No. 145-3 and subject to South Dakota State Law.

APR 1 1993


JOHN HATCH, Chief Engineer
Water Rights Division
Department of Environment and Natural Resources

145-3



APR 1 1993

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3191

145-3

Timothy J. Olson
Water Permits Coordinator
Dept. of Game, Fish & Parks
523 East Capitol
Pierre, SD 57501

Dear Mr. Olson:

Enclosed is Water License No. 145-3. Water License No. 145-3 is the final document which completes the process of obtaining a water right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division
(605) 773-3352

enclosures

145-3

FROM: Olson, Tim

TO: Hatch, John DENR/DENR
Schaal, Tim DENR/DENR

DATE: 04-27-93
TIME: 15:43

CC: Olson, Tim

SUBJECT: East Vermillion Lake Water License
PRIORITY: R
ATTACHMENTS:

John,

Earlier this month we received Water License No. 145-3 for East Vermillion Lake. Upon review of the document, I noticed that it did not include reference to a primary spillway elevation like many of the more recent licenses or rights that we have for other dams around the state. I discussed this situation with Tim Schaal of your staff and he advised me that it might be a good idea to request your reconsideration of the final license so that the elevation of the primary spillway (1435.0 feet msl) could be included. Doing so would clarify our right to store water to a specific elevation and may help prevent any future misunderstandings in regard to water level management at East Vermillion Lake. If you or Tim have any further questions or comments in regard to this matter, please give me a call at X6208 or send a reply via E-mail. Thank you.

////Tim Olson////

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STATE OF SOUTH DAKOTA

REISSUED WATER LICENSE NO. 145-3

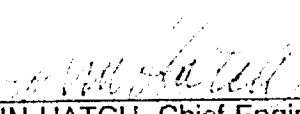
(1) The South Dakota Department of Game, Fish & Parks, of 523 E Capitol, Pierre, SD 57501 was issued Water License No. 145-3, April 1, 1993** for a water right to store 7,040 acre feet of water from the East Vermillion River in the East Vermillion Dam, McCook County, South Dakota for recreation and fish & wildlife propagation purposes. Water License No. 145-3, with a priority date of February 10, 1956 was issued to the Department for diversion of water with construction of the described water supply system completed and the application to beneficial use of said water completed.

** The water license issued on April 1, 1993, did not specify a spillway elevation for East Vermillion Dam. The spillway elevation is at 1435.0 feet mean sea level (msl). The license is being reissued to clarify the storage of water to the outlet elevation.

(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to store sufficient water annually to the outlet elevation of 1435.0 feet msl for beneficial use. The spillway of East Vermillion Dam is located 1,060 feet west and 860 feet north of the SE corner of Section 34, T102N, R53W (S 1/2 SE 1/4). Total storage at elevation 1435.0 feet msl is approximately 7,040 acre feet of water.

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 the South Dakota Department of Game, Fish & Parks of 523 E Capitol, Pierre, SD 57501 the holders and/or owners of Water Permit No. 145-3 is issued a license to appropriate water, the right to store sufficient water annually from the East Vermillion River in the East Vermillion Dam to an elevation of 1435.0 feet msl with a priority date of February 10, 1956 from the location specified in (2) of this license. The water is to be used for recreation and fish & wildlife propagation purposes. This license is subject to any limitations or qualifications listed in Water Permit No. 145-3 and subject to South Dakota State Law.



JOHN HATCH, Chief Engineer
Water Rights Division
Department of Environment and Natural Resources



145-3

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

JUL 6 1993

145-3

Timothy J. Olson
Water Permits Coordinator
Dept of Game, Fish & Parks
523 E Capitol
Pierre, SD 57501

Dear Mr. Olson:

Enclosed is Reissued Water License No. 145-3. The water license was reissued to include the spillway elevation of East Vermillion Dam. The remaining portions of the original water license were not altered by the reissuance.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'John Hatch', is written over the typed name.

JOHN HATCH, Chief Engineer
Water Rights Division
(605) 773-3352

enclosure

99.2
1 HEL
SD Dept of
Game Fish & Parks

T 933

38-R
D-13

4

34

102-53

11.9
3 HEL

T 909

49.8
1 HEL

145-3

8.0
2 HEL

Kimberly A. Lohr
June 18, 1992

16.0
1

8.6
4

860'

1060'

Kimberly A. Lohr
June 18, 1992